

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the above-identified patent application.

Listing of Claims

1. (currently amended) A method for implementing an interactive television application on a plurality of user equipment in different households to provide interactive services to a plurality of users, the method comprising:

selectively enabling a sub-plurality of user equipment for data collection in response to a command from a head end to the sub-plurality of user equipment;

selectively enabling a subset of research criteria from a plurality of research criteria to support a research focus;

generating an individual data record for each one of a series of discrete acts that 1) occurred to interface on the interactive television application of the enabled sub-plurality of user equipment and the interactive television application, and 2) meets the enabled subset of research criteria;

screening the data records based on the enabled subset of research criteria for determining the user's usage patterns; and

processing the screened data records to evaluate the research focus ~~determine quality measures of the interactive services based on the usage patterns.~~

2. (original) The method of claim 1 further comprising implementing a data collection application to generate the data records.

3. (original) The method of claim 1 further comprising providing the user equipment to include a set-top box.

4. (cancelled)

5. (original) The method of claim 1 further comprising sending the individual data records to a central facility.

6. (original) The method of claim 1 further comprising screening the generated data records to filter out some of the records.

7. (original) The method of claim 1 further comprising processing the individual data records to capture information from the data records.

8. (original) The method of claim 1 wherein the generating comprises:

generating the data records to include one set of data records for identifying parameters for a user profile; and

generating the data records to also include another set of data records.

9. (original) The method of claim 1 wherein the generating comprises:

generating the data records to include one set of data records for determining where to place interactive advertisements; and

generating the data records to also include another set of data records.

10. (original) The method of claim 1 wherein the data records are in a format that is compatible with conventional database applications.

11. (original) The method of claim 1 wherein the data records are generated for discrete acts that mark changes in an application flow of the interactive television application.

12. (original) The method of claim 1 wherein the interactive television application is an interactive television program guide application.

13. (original) The method of claim 1 further comprising:

implementing a storage device that stores the data records; and

providing a conversion device for converting signals carrying the data records between the user equipment and the storage device.

14. (original) The method of claim 1 further comprising generating a data field in the data records for a time at which a particular act occurred.

15. (original) The method of claim 1 further comprising generating a user input data record when the user presses a key on a user input device.

16. (original) The method of claim 1 further comprising generating a turbo key data record when the user holds a key on a user input device to repeat the key entry.

17. (original) The method of claim 1 further comprising generating a state change data record when the interactive television application changes states.

18. (original) The method of claim 1 further comprising generating a channel change data record when the user changes channels.

19. (original) The method of claim 1 further comprising generating an ad display data record when an advertisement is displayed by the interactive television application.

20. (original) The method of claim 1 further comprising generating an information display data record when an information display screen is displayed.

21. (original) The method of claim 1 further comprising generating a highlight data record when a highlight window is positioned on an item in a display screen.

22. (original) The method of claim 1 further comprising generating a parental lock data record when a parental control feature is selected.

23. (original) The method of claim 1 further comprising generating a favorite channel data record when a favorite channel option is selected.

24. (original) The method of claim 1 further comprising generating a setup option data record when a user changes setup options.

25. (original) The method of claim 1 further comprising generating a reset database data record when a database of the interactive television application is reset.

26. (original) The method of claim 1 further comprising generating an identification data record to identify a software version of the interactive television application.

27. (original) The method of claim 1 further comprising generating a current status data record to identify a current status of the interactive television application.

28. (original) The method of claim 1 wherein the generating comprises generating the data records for automatic acts and for manual acts that occurred to interface the user and the interactive television application.

29. (original) The method of claim 1 further comprising aggregating certain individual data records to form other data records.

30. (previously presented) The method of claim 1 further comprising processing the data records to reduce the amount of data.

31. (original) The method of claim 1 further comprising screening the generated data records according to their position in memory to filter out some of the records.

32-45. (cancelled)

46. (currently amended) A system for providing an interactive television application implemented on a plurality of user equipment in different households to provide interactive services to a plurality of users, the system comprising:

means for selectively enabling a sub-plurality of user equipment for data collection in response to a command from a head end to the sub-plurality of user equipment;

means for selectively enabling a subset of research criteria from a plurality of research criteria to support a research focus;

means for generating an individual data record for each one of a series of discrete acts that 1) occurred to interface on the interactive television application of the enabled sub-plurality of user equipment and the interactive television application, and 2) meets the enabled subset of research criteria;

means for screening the data records based on the enabled subset of research criteria for determining the user's usage patterns; and

means for processing the screened data records to evaluate the research focus determine quality measures of the interactive services based on the usage patterns.

47. (original) The system of claim 46 further comprising means for providing a data collection application implemented to generate the data records.

48. (original) The system of claim 46 wherein the user equipment includes a set-top box.

49. (cancelled)

50. (original) The system of claim 46 further comprising means for sending the individual data records to a central facility.

51. (original) The system of claim 46 further comprising means for screening the generated data records to filter out some of the records.

52. (original) The system of claim 46 further comprising means for processing the individual data records to capture information from the data records.

53. (original) The system of claim 46 wherein the means for generating comprises means for generating the data records to include one set of data records for identifying parameters for a user profile and for generating the data records to also include another set of data records.

54. (original) The system of claim 46 wherein the means for generating comprises means for generating the data records to include one set of data records for determining where to place interactive advertisements and for generating the data records to also include another set of data records.

55. (original) The system of claim 46 wherein the data records are in a format that is compatible with conventional database applications.

56. (original) The system of claim 46 wherein the data records are generated for discrete acts that mark changes in an application flow of the interactive television application.

57. (original) The system of claim 46 wherein the interactive television application is an interactive television program guide application.

58. (original) The system of claim 46 further comprising:

a storage device that stores the data records; and
means for converting signals carrying the data records between the user equipment and the storage device.

59. (original) The system of claim 46 further comprising means for generating a data field in the data records for a time at which a particular act occurred.

60. (original) The system of claim 46 further comprising means for generating a user input data record when the user presses a key on a user input device.

61. (original) The system of claim 46 further comprising means for generating a turbo key data record when the user holds a key on a user input device to repeat the key entry.

62. (original) The system of claim 46 further comprising means for generating a state change data record when the interactive television application changes states.

63. (original) The system of claim 46 further comprising means for generating a channel change data record when the user changes channels.

64. (original) The system of claim 46 further comprising means for generating an ad display data record when an advertisement is displayed by the interactive television application.

65. (original) The system of claim 46 further comprising means for generating an information display data record when an information display screen is displayed.

66. (original) The system of claim 46 further comprising means for generating a highlight data record when a highlight window is positioned on an item in a display screen.

67. (original) The system of claim 46 further comprising means for generating a parental lock data record when a parental control feature is selected.

68. (original) The system of claim 46 further comprising means for generating a favorite channel data record when a favorite channel option is selected.

69. (original) The system of claim 46 further comprising means for generating a setup option data record when a user changes setup options.

70. (original) The system of claim 46 further comprising means for generating a reset database data record when a database of the interactive television application is reset.

71. (original) The system of claim 46 further comprising means for generating an identification data record to identify a software version of the interactive television application.

72. (original) The system of claim 46 further comprising means for generating a current status data record to identify a current status of the interactive television application.

73. (original) The system of claim 46 wherein the means for generating comprises means for generating the data

records for automatic acts and for manual acts that occurred to interface the user and the interactive television application.

74. (previously presented) The system of claim 46 further comprising means for aggregating certain individual data records to form other data records.

75. (previously presented) The system of claim 46 further comprising means for processing the data records to reduce the amount of data.

76. (original) The system of claim 46 further comprising means for screening the generated data records according to their position in memory to filter out some of the records.

77-90. (cancelled)

91. (currently amended) A system for providing interactive services to a plurality of users of an interactive television application implemented on a plurality of user equipment in different households, the system comprising at least one processor configured to:

selectively enable a sub-plurality of user equipment for data collection in response to a command from a head end to the sub-plurality of user equipment;

selectively enable a subset of research criteria from a plurality of research criteria to support a research focus;

generate an individual data record for each one of a series of discrete acts that 1) occurred ~~to interface~~ on the interactive television application of the enabled sub-plurality of user equipment and the interactive television application, and 2) meets the enabled subset of research criteria;

screen the data records based on the enabled subset of research criteria ~~for determining the user's usage patterns~~; and process the screened data records to evaluate the research focus ~~determine quality measures of the interactive services based on the usage patterns~~.

92. (original) The system of claim 91 wherein the user equipment uses a data collection application to generate the data records.

93. (original) The system of claim 91 wherein the user equipment includes a set-top box.

94. (cancelled)

95. (original) The system of claim 91 wherein the user equipment sends the individual data records to a central facility.

96. (original) The system of claim 91 wherein the user equipment screens the generated data records to filter out some of the records.

97. (original) The system of claim 91 wherein the user equipment processes the individual data records to capture information from the data records.

98. (original) The system of claim 91 wherein the user equipment generates the data records to include one set of data records for identifying parameters for a user profile and the user equipment generates the data records to also include another set of data records.

99. (original) The system of claim 91 wherein the user equipment generates the data records to include one set of

data records for determining where to place interactive advertisements and the user equipment generates the data records to also include another set of data records.

100. (original) The system of claim 91 wherein the data records are in a format that is compatible with conventional database applications.

101. (original) The system of claim 91 wherein the data records are generated for discrete acts that mark changes in an application flow of the interactive television application.

102. (original) The system of claim 91 wherein the interactive television application is an interactive television program guide application.

103. (original) The system of claim 91 further comprising:

a storage device that stores the data records; and
a conversion device for converting signals carrying the data records between the user equipment and the storage device.

104. (original) The system of claim 91 wherein the user equipment generates a data field in the data records for a time at which a particular act occurred.

105. (original) The system of claim 91 wherein the user equipment generates a user input data record when the user presses a key on a user input device.

106. (original) The system of claim 91 wherein the user equipment generates a turbo key data record when the user holds a key on a user input device to repeat the key entry.

107. (original) The system of claim 91 wherein the user equipment generates a state change data record when the interactive television application changes states.

108. (original) The system of claim 91 wherein the user equipment generates a channel change data record when the user changes channels.

109. (original) The system of claim 91 wherein the user equipment generates an ad display data record when an advertisement is displayed by the interactive television application.

110. (original) The system of claim 91 wherein the user equipment generates an information display data record when an information display screen is displayed.

111. (original) The system of claim 91 wherein the user equipment generates a highlight data record when a highlight window is positioned on an item in a display screen.

112. (original) The system of claim 91 wherein the user equipment generates a parental lock data record when a parental control feature is selected.

113. (original) The system of claim 91 wherein the user equipment generates a favorite channel data record when a favorite channel option is selected.

114. (original) The system of claim 91 wherein the user equipment generates a setup option data record when a user changes setup options.

115. (original) The system of claim 91 wherein the user equipment generates a reset database data record when a database of the interactive television application is reset.

116. (original) The system of claim 91 wherein the user equipment generates an identification data record to identify a software version of the interactive television application.

117. (original) The system of claim 91 wherein the user equipment generates a current status data record to identify a current status of the interactive television application.

118. (original) The system of claim 91 wherein the user equipment generates the data records for automatic acts and for manual acts that occurred to interface the user and the interactive television application.

119. (previously presented) The system of claim 91 wherein the user equipment aggregates certain individual data records to form other data records.

120. (previously presented) The system of claim 91 wherein the user equipment processes the data records to reduce the amount of data.

121. (original) The system of claim 91 wherein the user equipment screens the generated data records according to their position in memory to filter out some of the records.

122-135. (cancelled)

136. (new) The method of claim 1 wherein the research focus comprises research on the usability of the interactive television system.

137. (new) The method of claim 1 wherein the research focus comprises research on placement and pricing of advertisements.

138. (new) The method of claim 1 wherein the research focus comprises research on the characteristics of a particular user demographic.

139. (new) The method of claim 1 wherein the research focus comprises television channel viewing statistics.

140. (new) The method of claim 1 wherein the data records comprise a rate of repetition of discrete events between the user and interactive television system over a particular period of time.

141. (new) The system of claim 46 further comprising means for conducting research on the usability of the interactive television system as the research focus.

142. (new) The system of claim 46 further comprising means for conducting research on placement and pricing of advertisements as the research focus.

143. (new) The system of claim 46 further comprising means for conducting research on the characteristics of a particular user demographic as the research focus.

144. (new) The system of claim 46 further comprising means for conducting research on television channel viewing statistics as the research focus.

145. (new) The system of claim 46 further comprising means for generating data records comprising a rate of repetition of discrete events between the user and interactive television system over a particular period of time.

146. (new) The system of claim 91 wherein the research focus comprises research on the usability of the interactive television system.

147. (new) The system of claim 91 wherein the research focus comprises research on placement and pricing of advertisements.

148. (new) The system of claim 91 wherein the research focus comprises research on the characteristics of a particular user demographic.

149. (new) The system of claim 91 wherein the research focus comprises television channel viewing statistics.

150. (new) The system of claim 91 wherein the data records comprise a rate of repetition of discrete events between the user and interactive television system over a particular period of time.

151. (new) A method for implementing an interactive television application on user equipment to provide interactive services to a user, the method comprising:

selecting a plurality of research focuses related to interactive television services;

generating a data record of discrete actions that 1) occurred between the user and the interactive television application and 2) are related to at least one of the plurality of selected research focuses;

differentiating information contained in the generated data record based on the at least one research focus to which it relates; and

storing the generated data record.